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Chapter 14

Flight Lessons

The experience I gained as part of a chase crew proved to be invaluable in learning to fly a hot air balloon. By the time we bought Sundancer I had already experienced many of the essential steps in unpacking, cold inflation, launching and generally caring for a balloon. Hot air inflation techniques and flying were another story. I had only done one hot air inflation and George had been picking where and when he would let me fly. These were usually days when the weather conditions were very stable. Now, I had to learn to judge all this myself and how to handle the balloon under adverse conditions.

I studied books on weather and learned to call the pilot briefing service and to understand and interpret what they were saying. I became an avid watcher of weather reports. All this helped, but many times even this wasn't enough. I quickly learned the winds are very fickle. We would pick out what appeared to be good flying weather and drive to the launch site on the mesa. We would arrive with the air dead calm and, as soon as the balloon was ready for inflation, a breeze would appear. It was as if an assistant for Mother Nature was hiding behind a bush and would signal her to let loose a breeze as soon as we were ready to go.

A hot air balloon can be launched in a fair amount of wind if you have a good crew so, early in the training, there is the temptation to go ahead and inflate under marginal conditions and hope the breeze will slow down after you have flown for awhile. After you have done this a couple of times, and either burned the balloon during the launch or had a rough landing,

you learn to wait and watch the wind conditions for awhile. If there are other balloons around someone will usually try to launch anyway and you can stand there smugly watching their efforts and point out you had tried that once, and once was enough.

Occasionally we ended up in a situation where there was no choice but to launch under windy conditions. One day, well along in my lessons, we had joined several other balloons for a weekend flight. We had laid out Sundancer about in the middle of the launch field and started cold inflation. There was a small breeze, but it seemed steady and I felt I had a good chance to control the balloon for a safe take off. Everything went great until it was time for the hot inflation phase. The envelope was just ready to clear the ground and stand upright when the breeze abruptly shifted directions and increased sharply. The balloon swung around and started to drag.

"Dad! You're headed right for two pickups!" Phil hollered.

I glanced quickly at the pickups and saw that if I ripped-out, the envelope would probably end up draped over both of them and I could expect severe damage. You don't have a lot of time to think under circumstances like these. I still had the burner going full blast, the crew almost had the basket under the envelope, and we were picking up speed rapidly. I decided to take off and try to clear the trucks. The crew released the gondola and we slowly gained altitude, still headed right for the windshield of one pickup. Suddenly a figure appeared in the back of the pickup and climbed onto the roof. Obviously, he was going to try and push us off.

"Get down! Get down!" George hollered.

We were traveling about nine or ten miles an hour now and there was no way any one man could stop Sundancer. I squeezed tighter on the blast valve, trying to get the last possible calorie of heat into the envelope. I could see that we stood a good chance of clearing the windshield, but the man was still standing there on top of the cab. By this time several other people were also yelling at him.

"Somebody get 'em out of the way," I yelled and several people started running toward the truck.

Finally he realized that if he stayed there, Sundancer would wipe him off the top like a golf ball off a tee. He flopped down

on his belly, still right on top of the cab. As the gondola cleared the windshield I felt a slight bump. Over my shoulder I saw the man waving from the back of the pickup. "I'm OK," he yelled. Apparently the padded bottom edge of the gondola had scooped him off the cab and into the bed of the pickup. He had landed on several coats tossed in the back and escaped injury.

Lessons were a mixture of fun and hard work. George wanted his students to become expert pilots; just being good wasn't enough. There were times I felt he was almost sadistic. One day he had me land on fifteen roads in a period of less than an hour and a half. My arm muscles felt the wear and tear from that for many days. Another time, we were ground tracking about ten feet above the terrain. I bent over to check the fuel level in one of the tanks. When I straightened up, the balloon was descending. I quickly fed heat into the envelope, but we still bounced off the ground rather hard. I couldn't figure out what had happened because the balloon had seemed very stable when I bent over. George told me later when I bent over, he had pulled the vent line just enough to put the balloon in a descent. He felt I was taking too long to inspect the fuel level. He made his point.

Hot air ballooning is one of the safest flying sports, but emergencies can occur. Instructions included practical exercises on how to handle these emergencies and to gain confidence in my ability to respond under potentialy dangerous conditions. For example, one exercise was to take the balloon up about 2,500 feet above the ground and practice terminal descents. Now, any way you say it, "terminal descent" sounds ominous. The first few times are a scary experience.

"I want you to vent for about four seconds," he said. "When we're falling about 800 feet per minute I want you to blast until we stop and time how long it takes."

I knew "terminal descent" really meant the fastest speed the balloon would fall at this altitude and load. In the case of Sundancer this was about 800 feet per minute. I opened the vent and Sundancer hesitated for a moment and then began to fall. As I anxiously peered over the side of the balloon basket and blasted heat up into the envelope I could feel the wind rush by my head. Much to my surprise the balloon stopped and started to gain altitude after about a ten second burn.

"OK, do you see the point?" George asked. "If you have a flameout on the pilot light at 2,000 feet, you don't need to panic. It will be almost two and a half minutes before you hit the ground, so you've got lots of time to try to get the burner restarted. Even if you can't get a relight, you can probably survive an 800 foot per minute impact with little or no injury."

Next, we took the balloon back up, turned off the pilot light, and then relit it in the air. My only consolation on this exercise was that George was right there in the gondola with me and if it didn't work, he was going to hit the ground just as hard as I was.

"OK, put the balloon into an ascent," he instructed. "I want to have a little pad on that 2,000 feet in case you have a little trouble."

"Thanks a lot," I said. "I'm nervous enough without you expecting me to have some trouble."

"Just get your striker in one hand before you kill the pilot light."

"I wish you wouldn't use words like kill the pilot!"

"Just don't drop the striker over the side."

I tried to swallow, finally gave up, and closed the valve which fed the pilot light. It seemed like an eternity before the flame went out. I opened the valve, held the striker over one pilot light tube, and pulled the trigger several times. Sparks flew, but no flame appeared.

"Relax, Cal. It will take a few seconds for the pressure to build up."

I pulled the trigger several more times, trying not to appear frantic. A blue flame finally appeared and I hit the blast valve and glanced at the altimeter and then over the side. We were barely descending and the whole process couldn't have taken more than ten to fifteen seconds. George just grinned like he had known everything was going to go well from the start. However, I did notice he had his hand on the extra striker in his pocket.

I also had to practice landings by just turning the tank valve on and off so that if the main blast valve stuck open, the balloon could still be landed safely. On one occasion this practice turned into the real thing. I had landed about four or five times using the tank valve and when I decided to go back to

the blast valve, I found it was stuck partly open. We had no problems landing again, but I couldn't get the valve to close. By the time we were back on the ground, liquid propane was leaking around the valve stem. It looked like the day's flying was over.

The chase crew pulled up in the pickup and somebody suggested we call the Balloon Ambulance. Yes, folks, we even had an emergency repair service available on site. One of the local balloon repair shops sent out an old four-wheel drive panel truck to the launch site every Saturday and Sunday to make minor repairs and take balloons into the shop if necessary. We gave Tony a call on the CB radio.

"Don't take the balloon down yet," he advised. "I might be able to fix the valve while the balloon is still up."

In the distance I heard a siren start up and could see the old truck roaring across the mesa toward us. Tony pulled up in a cloud of dust and jumped out of the truck.

"It looks like it's just a frozen 'O' ring. I think that if we can heat the balloon up pretty hot, I can change it before it cools off and you won't have to deflate it."

I put heat into the envelope until it was tugging at four people holding the basket and then turned off the pilot and main valve. Tony stepped up with his wrenches. We figured he had about five minutes to break down the valve and repair it before the envelope cooled off enough to sag to the point where we would have to finish deflating and start from scratch. All eyes were on the master.

The valve came loose from its seating and Tony removed the "O" ring and replaced it. Next came a special lubricant and a check of the valve seat to see if there were any problems there. By this time the envelope was sagging visibly. The valve assembly went back in smoothly, but the envelope was starting to list to one side. The pressure check showed no leaks and we relit the pilot. Carefully we fed heat into the envelope and Sundancer swelled back to attention. We gave Tony a round of applause for a superb performance and returned to the sky.

In total, it took me thirteen hours of instruction before I was allowed to take the FAA check flight. Even though I took my check ride on a weekday and the chase crew covered me with champagne, the following Sunday everyone doused me

with beer anyway and this time they cut off the bottom of my shirt. Later, George and I stood leaning on the side of the pickup.

"Well, Cal, it's been a good three years," George said.

"I know. I'll miss flying with you." I was feeling both happy and sad.

"Oh, I think we'll do some more flying together. Occasionally one of us will hit a day where we can't fly and we'll just chase one balloon or the other. Besides, you'll have to have some more instruction time before you take your commercial license check ride."

"I'm just glad to have the private pilot's rating. I'll have to wait and see about a commercial license."

George grinned, "You'll try. I just know you'll try. The challenge is there and you won't be able to pass it up. Just remember, that private pilot's license doesn't mean you really know how to fly. It just means that you've finally learned enough to be dangerous. From here on you will really start to learn. Just keep in mind that now you can carry passengers and their lives are in your hands."

I looked at him and realized what he said was true. I had a long way to go and a lot to learn, but I had learned from a master and I didn't intend to let him down.